



SEQUENCE LISTING

<110> Hunter, Tony
Kun Ping, Lu

<120> NIMA INTERACTING PROTEINS

<130> 66671-044

<140> US 10/648,631

<141> 2003-08-25

<150> US 10/616,410

<151> 2003-07-08

<160> 22

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1014

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

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<400> 1

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Met Ala Asp Glu Glu Lys Leu Pro Pro

1 5

ggc tgg gag aag cgc atg agc cgc agc tca ggc cga gtg tac tac ttc 99
Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg Val Tyr Tyr Phe
10 15 20 25

aac cac atc act aac gcc agc cag tgg gag cgg ccc agc ggc aac agc 147
Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro Ser Gly Asn Ser
30 35 40

agc agt ggt ggc aaa aac ggg cag ggg gag cct gcc agg gtc cgc tgc 195
Ser Ser Gly Gly Lys Asn Gly Gln Gly Glu Pro Ala Arg Val Arg Cys
45 50 55

tcg cac ctg ctg gtg aag cac agc cag tca cgg cgg ccc tcg tcc tgg 243
Ser His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp
60 65 70

cgg cag gag aag atc acc cgg acc aag gag gag gcc ctg gag ctg atc 291
Arg Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile

75	80	85	
aac ggc tac atc cag aag atc aag tgc gga gag gag gac ttt gag tct			339
Asn Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser			
90	95	100	105
ctg gcc tca cag ttc agc gac tgc agc tca gcc aag gcc agg gga gac			387
Leu Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp			
	110	115	120
ctg ggt gcc ttc agc aga ggt cag atg cag aag cca ttt gaa gac gcc			435
Leu Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala			
	125	130	135
tcg ttt gcg ctg cgg acg ggg gag atg agc ggg ccc gtg ttc acg gat			483
Ser Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp			
	140	145	150
tcc ggc atc cac atc atc ctc cgc act gag tgagggtggg gagcccaggc			533
Ser Gly Ile His Ile Ile Leu Arg Thr Glu			
	155	160	
ctggcctcgg ggcagggcag ggcggctagg ccggccagct ccccttgcc cgccagccag			593
tggccgaacc cccactccc tgccaccgtc acacagtatt tattgttccc acaatggctg			653
ggagggggcc cttccagatt gggggccctg ggggtcccccac tccctgtcca tccccagttg			713
gggctgcgac cgccagattc tcccttaagg aattgacttc agcaggggtg ggaggctccc			773
agaccaggg cagtgtggtg ggaggggtgt tccaaagaga aggcctggtc agcagagccg			833
ccccgtgtcc cccaggtgc tggaggcaga ctcgagggcc gaattgtttc tagttaggcc			893
acgctcctct gttcagtcgc aaaggtgaac actcatgcgg cagccatggg ccctctgagc			953
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a			1014
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<211> 163			
<212> PRT			
<213> Homo sapiens			
<400> 2			
Met Ala Asp Glu Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser			
1	5	10	15
Arg Ser Ser Gly Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser			
	20	25	30
Gln Trp Glu Arg Pro Ser Gly Asn Ser Ser Ser Gly Gly Lys Asn Gly			
	35	40	45
Gln Gly Glu Pro Ala Arg Val Arg Cys Ser His Leu Leu Val Lys His			
	50	55	60
Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg Gln Glu Lys Ile Thr Arg			
65	70	75	80
Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn Gly Tyr Ile Gln Lys Ile			
	85	90	95
Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu Ala Ser Gln Phe Ser Asp			
	100	105	110
Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu Gly Ala Phe Ser Arg Gly			

	115		120		125										
Gln	Met	Gln	Lys	Pro	Phe	Glu	Asp	Ala	Ser	Phe	Ala	Leu	Arg	Thr	Gly
	130					135					140				
Glu	Met	Ser	Gly	Pro	Val	Phe	Thr	Asp	Ser	Gly	Ile	His	Ile	Ile	Leu
145					150					155					160
Arg	Thr	Glu													

<210> 3
 <211> 31
 <212> DNA
 <213> Homo sapiens

<400> 3
 gcgcctgcag tatctataya tggaataytg t 31

<210> 4
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<400> 4
 gcgcggatcc rggtttcaga ggktyraasa g 31

<210> 5
 <211> 30
 <212> DNA
 <213> Homo sapiens

<400> 5
 gcgcgtacca agwccacygt ayattattcc 30

<210> 6
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic peptide

<400> 6
 Met Tyr Asp Val Pro Asp Tyr Ala Ser Arg Pro Gln Asn
 1 5 10

<210> 7
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic peptide

<400> 7

Met	Ala	Ser	Tyr	Pro	Tyr	Asp	Val	Pro	Asp	Tyr	Ala	Ser	Pro	Glu	Phe
1				5					10					15	
Leu	Val	Asp	Pro	Pro	Gly	Ser	Lys	Asn	Ser	Ile	Ala	Arg	Gly	Lys	Met
			20					25						30	

<210> 8

<211> 39

<212> PRT

<213> Homo sapiens

<400> 8

Glu	Lys	Leu	Pro	Pro	Gly	Trp	Glu	Lys	Arg	Met	Ser	Arg	Ser	Ser	Gly
1				5					10					15	
Arg	Val	Tyr	Tyr	Phe	Asn	His	Ile	Thr	Asn	Ala	Ser	Gln	Trp	Glu	Arg
			20					25						30	
Pro	Ser	Gly	Asn	Ser	Ser	Ser									
			35												

<210> 9

<211> 39

<212> PRT

<213> Yeast ESS1

<400> 9

Thr	Gly	Leu	Pro	Thr	Pro	Trp	Thr	Val	Arg	Tyr	Ser	Lys	Ser	Lys	Lys
1				5					10					15	
Arg	Glu	Tyr	Phe	Phe	Asn	Pro	Glu	Thr	Lys	His	Ser	Gln	Trp	Glu	Glu
			20					25						30	
Pro	Glu	Gly	Thr	Asn	Lys	Asp									
			35												

<210> 10

<211> 38

<212> PRT

<213> Homo sapiens

<400> 10

Val	Pro	Leu	Pro	Ala	Gly	Trp	Glu	Met	Ala	Lys	Thr	Ser	Ser	Gly	Gln
1				5					10					15	
Arg	Tyr	Phe	Leu	Asn	His	Ile	Asp	Gln	Thr	Thr	Thr	Trp	Gln	Asp	Pro
			20					25						30	
Arg	Lys	Ala	Met	Leu	Ser										
			35												

<210> 11

<211> 38

<212> PRT

<213> Mus musculus

<400> 11

Ser	Pro	Leu	Pro	Pro	Gly	Trp	Glu	Glu	Arg	Gln	Asp	Val	Leu	Gly	Arg
1				5					10					15	
Thr	Tyr	Tyr	Val	Asn	His	Glu	Ser	Arg	Arg	Thr	Gln	Trp	Lys	Arg	Pro
			20					25					30		
Ser	Pro	Asp	Asp	Asp	Leu										
			35												

<210> 12

<211> 38

<212> PRT

<213> Yeast RSPS

<400> 12

Gly	Arg	Leu	Pro	Pro	Gly	Trp	Glu	Arg	Arg	Thr	Asp	Asn	Phe	Gly	Arg
1				5					10					15	
Thr	Tyr	Tyr	Val	Asp	His	Asn	Thr	Arg	Thr	Thr	Thr	Trp	Lys	Arg	Pro
			20					25					30		
Thr	Leu	Asp	Gln	Thr	Glu										
			35												

<210> 13

<211> 38

<212> PRT

<213> Homo sapiens

<400> 13

Thr	Ser	Val	Gln	Gly	Pro	Trp	Glu	Arg	Ala	Ile	Ser	Pro	Asn	Lys	Val
1				5					10					15	
Pro	Tyr	Tyr	Ile	Asn	His	Glu	Thr	Gln	Thr	Thr	Cys	Trp	Asp	His	Pro
			20					25					30		
Lys	Met	Thr	Glu	Leu	Tyr										
			35												

<210> 14

<211> 37

<212> PRT

<213> Rattus rattus

<400> 14

Ser	Asp	Leu	Pro	Ala	Gly	Trp	Met	Arg	Val	Gln	Asp	Thr	Ser	Gly	Thr
1				5					10					15	
Tyr	Tyr	Trp	His	Ile	Pro	Thr	Gly	Thr	Thr	Gln	Trp	Glu	Pro	Pro	Gly
			20					25					30		
Arg	Ala	Ser	Pro	Ser											
			35												

<210> 15

<211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> consensus sequence

<400> 15
 Leu Pro Gly Trp Glu Gly Tyr Tyr Asn His Thr Thr Trp Pro
 1 5 10

<210> 16
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 16
 His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg
 1 5 10 15
 Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn
 20 25 30
 Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu
 35 40 45
 Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu
 50 55 60
 Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala Ser
 65 70 75 80
 Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp Ser
 85 90 95
 Gly Ile His Ile Ile Leu Arg Thr Glu
 100 105

<210> 17
 <211> 107
 <212> PRT
 <213> Yeast ESS1

<400> 17
 His Ile Leu Ile Lys His Lys Asp Ser Arg Arg Pro Ala Ser His Arg
 1 5 10 15
 Ser Glu Asn Ile Thr Ile Ser Lys Gln Asp Ala Thr Asp Glu Leu Lys
 20 25 30
 Thr Leu Ile Thr Arg Leu Asp Asp Asp Ser Lys Thr Asn Ser Phe Glu
 35 40 45
 Ala Leu Ala Lys Glu Arg Ser Asp Cys Ser Ser Tyr Lys Arg Gly Gly
 50 55 60
 Asp Leu Gly Trp Phe Gly Arg Gly Glu Met Gln Pro Ser Phe Glu Asp
 65 70 75 80
 Ala Ala Phe Gln Leu Lys Val Gly Glu Val Ser Asp Ile Val Glu Ser
 85 90 95
 Gly Ser Gly Val His Val Ile Lys Arg Val Gly

100

105

<210> 18
<211> 83
<212> PRT
<213> E. coli

<400> 18
His Ile Leu Val Lys Glu Glu Lys Leu Ala Leu Asp Leu Leu Glu Gln
1 5 10 15
Ile Lys Asn Gly Ala Asp Phe Gly Lys Leu Ala Lys Lys His Ser Ile
20 25 30
Cys Pro Ser Gly Lys Arg Gly Gly Asp Leu Gly Glu Phe Arg Gln Gly
35 40 45
Gln Met Val Pro Ala Phe Asp Lys Val Val Phe Ser Cys Pro Val Leu
50 55 60
Glu Pro Thr Gly Pro Leu His Thr Gln Phe Gly Tyr His Ile Ile Lys
65 70 75 80
Val Leu Tyr

<210> 19
<211> 84
<212> PRT
<213> B.subtilis

<400> 19
His Ile Leu Val Ala Asp Lys Lys Thr Ala Glu Glu Val Glu Lys Lys
1 5 10 15
Leu Lys Lys Gly Glu Lys Phe Glu Asp Leu Ala Lys Glu Tyr Ser Thr
20 25 30
Asp Ser Ser Ala Ser Lys Gly Gly Asp Leu Gly Trp Phe Ala Lys Glu
35 40 45
Gly Gln Met Asp Glu Thr Phe Ser Lys Ala Ala Phe Lys Leu Lys Thr
50 55 60
Gly Glu Val Ser Asp Pro Val Lys Thr Gln Tyr Gly Tyr His Ile Ile
65 70 75 80
Lys Lys Thr Glu

<210> 20
<211> 91
<212> PRT
<213> C. jejuni

<400> 20
His Ile Leu Val Ala Thr Glu Lys Glu Ala Lys Asp Ile Ile Asn Glu
1 5 10 15
Leu Lys Gly Leu Lys Gly Lys Glu Leu Asp Ala Lys Phe Ser Glu Leu
20 25 30
Ala Lys Glu Lys Ser Ile Asp Pro Gly Ser Lys Asn Gln Gly Gly Glu

	35					40					45								
Leu	Gly	Trp	Phe	Asp	Gln	Ser	Thr	Met	Val	Lys	Pro	Phe	Thr	Asp	Ala				
	50					55					60								
Ala	Phe	Ala	Leu	Lys	Asn	Gly	Thr	Ile	Thr	Thr	Thr	Pro	Val	Lys	Thr				
65					70					75					80				
Asn	Phe	Gly	Tyr	His	Val	Ile	Leu	Lys	Glu	Asn									
				85					90										

<210> 21
 <211> 67
 <212> PRT
 <213> A. thaliana

Ile	Val	Ser	Lys	Ala	Asn	Phe	Glu	Glu	Val	Ala	Thr	Arg	Val	Ser	Asp				
1				5					10					15					
Cys	Ser	Ser	Ala	Lys	Arg	Gly	Gly	Asp	Leu	Gly	Ser	Phe	Gly	Arg	Gly				
			20					25					30						
Gln	Met	Gln	Lys	Pro	Phe	Glu	Glu	Ala	Thr	Tyr	Ala	Leu	Lys	Val	Gly				
		35					40					45							
Asp	Ile	Ser	Asp	Ile	Val	Asp	Thr	Asp	Ser	Gly	Val	His	Ile	Ile	Lys				
	50					55					60								
Arg	Thr	Glu																	
65																			

<210> 22
 <211> 45
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> consensus sequence

His	Ile	Leu	Val	Glu	Lys	Phe	Glu	Leu	Ala	Lys	Ser	Cys	Ser	Ser	Lys				
1				5				10						15					
Gly	Gly	Asp	Leu	Gly	Phe	Arg	Gly	Gln	Met	Phe	Asp	Ala	Ala	Phe	Leu				
			20					25					30						
Lys	Gly	Glu	Ser	Pro	Val	Thr	Gly	Tyr	His	Ile	Ile	Lys							
		35					40					45							